

AMENDED CLAIMS

[Received by the International Office on 30 May 2000 (30.05.00);  
claims 1 to 29 replaced with amended claims 1 to 29 (6 pages)]

5 1. A process for the treatment of at least one thin brittle metal strip (1, 21a, 21b, 30) having a thickness of less than 0.1 mm, comprising at least one step in which the thin strip (1, 21a, 21b, 21c, 30) is subjected to stresses, characterized in that, prior to the step of the process in which the thin strip (1, 21a, 21b, 21c, 30) is subjected to stresses, at least one side of the strip is covered with a coating layer (3, 3', 13, 13', 31) made of at least one polymer film so as to obtain, 10 on the strip, an adhesive layer having a thickness of between 1 and 100 µm, modifying the deformation and fracture properties of the thin metal strip, and in that the step of the process in which the thin strip is subjected to stresses is carried out 15 on the strip covered with the coating layer.

20 2. The process as claimed in claim 1, characterized in that the coating layer (3, 3') made of at least one polymer film consists of a self-adhering plastic film precoated with adhesive.

25 3. The process as claimed in claim 2, characterized in that the self-adhering plastic film precoated with adhesive comprises a layer of a pressure-sensitive self-adhering substance and in that the self-adhering coating layer (3, 3') is made to adhere to the thin metal strip (1) by pressing the coating layer (3, 3') onto the thin metal strip 30 (1).

35 4. The process as claimed in either of claims 2 and 3, characterized in that the plastic film

consists of one of the following materials: polyester, polytetrafluoroethylene, polyimide.

5. The process as claimed in any one of claims 2 to  
5, characterized in that one side of the thin  
brittle metal strip (1) is brought into contact  
with a first self-adhering polymer film (3), the  
nanocrystalline strip (1) thus being able to be  
handled, in that the second side of the thin  
10 brittle metal strip (1) is brought into contact  
with a second film (3') made of a self-adhering  
plastic, in that pressure is applied to the  
laminated strip (6) consisting of the thin brittle  
metal strip (1) between the two films of polymer  
15 material (3, 3') and in that a mechanical  
operation, for example a cutting operation, is  
carried out on the laminated strip (6).

20. The process as claimed in any one of claims 2 to  
4, characterized in that a plurality of laminated  
strips (6, 7a, 7b, 7c) each having a coating layer  
consisting of a plastic film precoated with a  
pressure-sensitive adhesive on at least one of its  
25 sides are produced, in that the plurality of  
laminated strips (6, 7a, 7b, 7c) are superposed  
and joined together by adhesion in order to obtain  
a laminated composite strip (11) and in that a  
mechanical operation, for example a cutting  
30 operation, is carried out on the laminated  
composite strip (11).

7. The process as claimed in any one of claims 2  
to 6, characterized in that the pressure-sensitive  
35 adhesive substance of the self-adhering plastic  
film precoated with adhesive is a crosslinkable  
substance and in that a crosslinking heat  
treatment is carried out on the coating layer  
adhering to the thin metal strip.

8. The process as claimed in claim 1, characterized  
in that the coating layer comprising at least one  
polymer film consists of a thermoplastic non-self-  
adhering polymer film precoated with adhesive on  
one of its faces, in that such a thermoplastic  
film precoated with adhesive is brought into  
contact with at least one of the sides of the thin  
metal strip (1) in order to obtain a laminated  
strip (7a, 7b, 7c), in that a plurality of  
laminated strips (7a, 7b, 7c) are manufactured in  
this way, in that the plurality of laminated  
strips (7a, 7b, 7c) are heated to a temperature of  
less than 400°C, in that the strips of the  
plurality of laminated strips (7a, 7b, 7c) heated  
to obtain a composite laminated strip (11) are  
superimposed and compressed one against another,  
and in that a process step involving stresses,  
such as a cutting operation, is carried out on the  
composite laminated strip (11).

9. The process as claimed in claim 8, characterized  
in that the thermoplastic film is made of one of  
the following polymer materials: polyethylene  
modified by acrylic acid or maleic anhydride;  
grafted polypropylene; polyamide; polyurethane

10. The process as claimed in claim 1, characterized  
in that the coating layer comprising at least one  
polymer film consists of a reactive adhesive  
polymer material, in that the coating layer is  
deposited on at least one of the sides of the thin  
brittle metal strip (1), in order to obtain a  
laminated strip (16), in that a plurality of  
laminated strips (16a, 16b, 16c) is produced in  
this way, in that the laminated strips (16a, 16b,  
16c) are heated to a temperature of less than  
400°C, in that the laminated strips (16a, 16b,